

In the Claims:

Claims 1-31 (cancelled)

Claim 32 (currently amended): An apparatus comprising:

- (a) a vessel with an opening, configured to accept a substance through the opening and further configured for the opening to be sealed;
- (b) a synthesis chamber configured to accept the vessel and further configured to establish or maintain a protective gas atmosphere when the vessel is present;
- (c) a test reactor configured to accept the vessel, and further configured to establish or maintain a protective gas atmosphere when the vessel is present;
- (d) means located within the test reactor to destroy the vessel in order to open the vessel and release the substance into the reactor, the means to destroy the vessel comprising a solvent to dissolve and destroy the vessel, a rotating stirring element to impact and destroy the vessel, or a mechanism to propel the vessel against the reactor to destroy the vessel; and
- (e) means for transferring the vessel, when sealed, from the synthesis chamber to the test reactor.

Claim 33 (previously presented): The apparatus of claim 32, wherein the vessel, when sealed, is air, moisture, or light impervious.

Claim 34 (previously presented): The apparatus of claim 32, wherein a gas-tight cover is used to seal the opening of the vessel.

Claim 35 (previously presented): The apparatus of claim 34, wherein the gas-tight cover is formed of the same material as the vessel.

Claim 36 (previously presented): The apparatus of claim 34, wherein the means to destroy the vessel destroys the gas-tight cover in order to open the vessel.

Claim 37 (previously presented): The apparatus of claim 32, wherein the vessel is sealed by covering the opening with a film, or a curable or viscous material.

Claim 38 (previously presented): The apparatus of claim 37, wherein the means to destroy the vessel destroys the film, or curable or viscous material in order to open the vessel.

Claim 39 (previously presented): The apparatus of claim 32, wherein the synthesis chamber is a glove box.

Claim 40 (previously presented): The apparatus of claim 32, wherein the protective gas is argon, nitrogen, helium or mixtures thereof.

Claim 41 (currently amended): The apparatus of claim 32, further comprising a lock connected to the test reactor, the lock being configured to establish a protective gas atmosphere around the vessel prior to the vessel being transferred into the test reactor.

Claim 42 (previously presented): The apparatus of claim 32, wherein the vessel is made from glass, ceramic, plastic, metal, or a composite material.

Claim 43 (previously presented): The apparatus of claim 32, wherein the vessel is made from a material that will dissolve in a solvent.

Claim 44 (previously presented): The apparatus of claim 32, wherein the means for transferring the vessel is a fully-automatic apparatus or a robot.

Claims 45-50 (cancelled).